

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims

1. (currently amended) An embedded system program code reduction method for scaling down a virtual machine and a set of application programs running on the virtual machine that are to be burned into an embedded system, wherein the virtual machine includes an object library, a compiler, and a runtime environment;

the embedded system program code reduction method comprising:

a compilation procedure for compiling the source code of each application program into bytecode;

an object picking procedure for picking ~~these~~ from the object library essential objects that are required for use by the application programs during runtime and collectively ~~pack~~ packing all picked objects into an essential-objects package

a compression procedure for compressing the essential-objects package into a compressed file of essential objects; and

a code integration procedure for integrating each bytecode-based application program, the compressed file of essential objects ~~from the compression module~~, and the runtime environment from the virtual machine into a set of embedded system program code which is to be burned into the embedded system.

2-3. (canceled)

4. (currently amended) An embedded system program code reduction system for use to scale down a virtual machine and a set of application programs running on the virtual machine that are to be burned into an embedded system, wherein the virtual machine includes an object library, a compiler, and a runtime environment;

the embedded system program code reduction system comprising:

a compilation module, which is used to compile the source code of each application program into bytecode;

an object picking module, which is used to pick ~~those~~ from the object library essential objects that are required for use by the application programs during runtime and collectively pack all picked objects into an essential-objects package;

a compression module, which is used to compress the essential-objects package into a compressed file of essential objects; and

a code integration module, which is used to integrate each bytecode-based application program, the compressed file of essential objects from the compression module, and the runtime environment from the virtual machine into a set of embedded system program code which is to be burned into the embedded system.

5-6. (canceled)